# **Camp Lick Project**

## **Visuals Report**

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for:

Blue Mountain Ranger District Malheur National Forest

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### Introduction

This report describes scenery values and effects associated with the Camp Lick Project. Viewing scenery is one of the most popular recreation activities on the Malheur National Forest (National Visitor Use Monitoring 2009). Scenery is a primary public value and legacy within the national forests, benefitting people through improved quality of life, recreational enjoyment, and tourism economics.

Visual resources are defined in the Malheur Forest Plan as: "the composite of basic terrain, geologic features, water features, vegetative patterns, and land use effects that typify a land unit and influence the visual appeal the unit may have for visitors," or in other words, managing visual resources is managing the scenic views visitors expect within specific areas. The Malheur Forest Plan specifies the desired level of management based on physical and sociological characteristics of a management area. This is the visual quality objective (VQO) and it refers to the degree of acceptable alteration of the characteristics of the landscape. Additionally, this section will also evaluate the scenic stability of the visual resource. Scenic stability measures the sustainability of the valued scenic character and its attribute using six levels from very high (where all attributes are sustainable) to no stability (where no dominant attributes are sustainable through time). Scenic stability recognizes the often subtle, incremental changes that can severely diminish or eliminate valued scenic character, using historical range of variation as a reference baseline for sustainability.

The County Road 18 and 20 visual corridors are located along portions of National Forest System (NFS) roads 36, 3618, and 3620 and County Road 18, which provide primary access into the planning area. These corridors include all of the foreground and middleground area visible (and potentially visible) from the roads described above. The proposed Camp Lick Project lies in a sensitivity level II corridor with a visual quality objective of partial retention in the foreground and modification in the middleground. Partial retention objectives are met when the results of management activities are noticeable to the casual forest visitor; however, visual changes are not so obvious as to dominate a particular portion of the landscape.

This evaluation applies current National Forest Scenery Management methodology in conjunction with existing Malheur Forest Plan direction (USDA Forest Service 1990). This includes scenery sustainability concepts described in Landscape Aesthetics, A Handbook for Scenery Management, Agriculture Handbook 701 (USDA Forest Service 1995) and Recommended SMS Refinements (USDA Forest Service 2007, Appendix J). This analysis relies on field studies and photography from the visual corridor sensitive viewpoints and other views of the project planning area, as well as coordination with project interdisciplinary team members and consideration of public preferences for scenic quality. Cumulative scenic quality was evaluated within the geographic scope of roadways and other sensitive public viewpoints within and adjacent to the project planning area. Integration of this scenery analysis will assure the Camp Lick Project is consistent with scenery-related Malheur National Forest direction, Forest Service policies, and applicable elements of Forest Service Visual Management and Scenery Management Systems.

### Regulatory Framework

### **Malheur Forest Plan Objectives:**

Manage other specified forest and county roads with a lower emphasis on maintaining visual
quality (sensitivity level II). Meet the visual quality objectives of foreground partial retention and
middleground modification in these corridor viewsheds. The effects of management activities
would be obvious in these middlegrounds (USDA Forest Service 1990, pages IV-15).

### **Forest-Wide Standards:**

• Forest-wide Standard 25: The minimum visual quality objective for the Forest is maximum modification. This visual quality objective will apply unless otherwise specified (USDA Forest Service 1990, pages IV-27).

• Forest-wide Standard 27: Rehabilitate landscapes containing negative visual elements (USDA Forest Service 1990, pages IV-27).

### Resource Elements, Indicators and Measures

The two indicators used to measure the effects to scenery resources are scenic integrity and scenic stability. These two indicators evaluate the intensity and duration of effects as well as the degree to which the alternatives would affect the resiliency of scenery attributes over the long-term.

Scenic Integrity is the degree to which the scenery is free from visible disturbances that detract from the natural and socially valued appearance, including disturbances due to human activities or extreme natural events inconsistent with the historic range of variability (USDA Forest Service 2007). The Malheur Forest Plan has standards and guides which utilize the visual management terms (i.e., visual quality objectives). This analysis will disclose the effects in these terms to verify whether or not the project alternatives will meet the standards and guides, as well as translate to the scenic integrity terminology. The following table displays the two sets of terminology.

able 1. Visual quality objectives and perceived alteration			
Visual quality objectives	Scenic integrity as people perceive it	Scenic integrity objectives	
Preservation	Unaltered, visually complete or intact	Very high	
Retention	Unnoticeably altered	High	
Partial retention	Slightly altered	Moderate	
Modification	Moderately altered	Low	
Maximum modification	Heavily altered	Very low	
Unacceptable modification	Unacceptably altered	Unacceptable	

Table 1. Visual quality objectives and perceived alteration

*Scenic Stability* is the degree to which the desired scenic character can be sustained through time and ecological progression (USDA Forest Service 2007). There are six scenic stability levels that can be directly correlated to vegetation information in a planning area. Scenic stability is defined at the following levels:

- 1. **Very High Stability** All dominant and minor scenery attributes of the valued landscape character are present and are likely to be sustained.
- 2. **High Stability** All dominant scenery attributes of the valued landscape character are present and are likely to be sustained. However, there may be scenery attribute conditions and ecosystem stressors that present a low risk to the sustainability of the dominant scenery attributes.
- 3. **Moderate Stability** Most dominant scenery attributes of the valued landscape character are present and are likely to be sustained. A few attributes may have been lost or are in serious decline.
- 4. **Low Stability** Some dominant scenery attributes of the valued scenic character are present and are likely to be sustained. Known scenery attribute conditions and ecosystem stressors may be seriously threatened or have already eliminated the others.

5. **Very Low Stability** – Most dominant scenery attributes of the valued scenic character are seriously threatened or absent due to their conditions and ecosystem stressors and are not likely to be sustained. The few that remain may be moderately threatened but are likely to be sustained.

6. **No Stability** – Dominant scenery attributes of the valued scenic character are absent or seriously threatened by their conditions and ecosystem stressors. None are likely to be sustained, except relatively permanent attributes such as landforms.

**Scenic Character** is landscape character type in a geographical area which have similar visual characters of landform, rock, vegetation, and water. No single landscape feature determines a character type; features intermix to create the appearance, but landform is usually more prominent than other characteristics.

The degrees of diversity in character types are called variety classes and establish a means of measuring inherent scenic quality. There are three variety classes, they are as follows:

- Class A (Distinctive): Refers to those areas where features of land form, vegetative patterns, water forms and geologic features are of unusual or outstanding visual quality. They are not common in character type.
- Class B (Common): Refers to those areas where features contain variety in form, line, color, and texture or combinations thereof but which tend to be common throughout the character type and are not withstanding in visual quality.
- Class C (Minimal): Refers to those areas whose features have little change in form, line, color, or texture. Includes all areas not found under class A and B (USDA 1981).

Variety class descriptions include landscape features of National Forest and other lands within the character type. This visual relationship is important and is considered in visual resource management.

The Malheur National Forest lies within the Blue Mountain character type. The character type is composed of several ranges separated by faulted valleys, down-folded basins, canyon lands, and lava plateaus. Topographic relief is highly variable with moderately steep slopes common. Most of the area consists of V-shaped valleys separated by narrow ridges or plateaus (USDA 1981).

The vegetation typically changes from juniper and sagebrush stands to open ponderosa pine forests to thick associated species forests. While, above timberline, the dense forest gives way to mountain meadows with wild flowers, alpine trees and shrubs. Vegetation patterns vary greatly depending on elevation, aspect and slope (USDA 1981).

Rock outcrops in this character types are generally subordinate. On some of the steeper slopes, basalt layers are quite distinctive. In the form of rock faces, talus slopes and cliffs.

Table 2. Character Types: elements

Class	Landform	Vegetation	Water-form	Rock-form
A	Consists of sharp peaks or rocky rugged mountains with steep slopes 50% or greater. Narrow, steep canyons with major drainages.  Highly dissected land creating numerous changes in aspect and vegetation.	A mosaic of vegetative patterns such as timber and openings in subalpine areas.  Unusual or outstanding diversity in plant species sometimes created by burn patterns.  Dramatic seasonal color variation an combination created by larch, willow, aspen and sumac	Rivers or large streams with numerous flow patterns such as riffles, rapids, falls, and pools. Also perennial, moderate volume flows with a meandering course.  Large man-made lakes and moderate to large lakes or marshes	Highly visible and unusual features such as long continuous rock cliffs and large massive outcrops with scattered vegetative cover.
В	The steep timbered slopes, 20-50% with undulating ridges generally topped by subalpine meadows.  Also moderately dissected rolling terrain found in lava plateaus.	A continuous vegetative cover with some mottled patterns and grassy openings.  Species in a mix common to the area.  Areas of obvious but not dramatic seasonal color.  Mature timber stands	Medium to small streams with some change in flow pattern and some meandering or straight in course. Low to moderate volume of flow. Small lakes, ponds, and marshes	Obvious, but not unusual rock features such as large boulders and random outcrops with a good vegetative cover.
С	The flat to rolling foothills & valley adjacent to the mountain chains.  Slopes less than 20%.  Little dissection and very little relief.	A continuous vegetative cover with little or no variety.  Little seasonal color and small to medium size trees.	N/A	Not obvious or nonexistent rock features.

Table 3. Resource elements, indicators and measures for assessing effects

Resource element	Resource indicator	Measure (quantify if possible)	Source (LRMP S/G; law or policy, BMPs, etc.)
Scenic Integrity	Visual quality objective (VQO) state	Change in VQO	Malheur Forest Plan
Scenic Stability	Scenic stability level	Change in scenic stability level	Handbook 701
Scenic Character	Variety Classes	Change in visual variety	Handbook 701, USDA 1981

### Affected Environment

### Methodology

The planning area scenic values were inventoried using a variety of methods. These methods are: driving through the planning area on the major and many minor roads, review of previous data gathered for various projects, and GIS information (i.e. fire history, location of visual corridors, geologic information, general vegetation maps, and water resource locations). All sources of

information gathered provide a more complete command of the visual landscape of the planning area.

### **Existing Condition**

The overall planning area provides a mostly natural appearance. The exception is the recent County Road 18 Project that has evidence of harvest activities less than two years old. Roads, landings, logging residues, and openings created by harvesting are noticeable to the casual visitor traveling along County Road 18, 20 and NFS Road 36.

The existing project planning area is characterized by ponderosa pine stands at lower elevations transitioning to mixed conifer stands consisting of ponderosa pine, western larch, grand fir, Douglas-fir, western white pine, and lodgepole pine at higher elevations. Snags and dying trees are visible in portions of the area.

### **Ecosystem Context**

Vegetation, as the major scenery attribute of the Camp Lick project planning area, offers opportunities for both scenery and ecosystem improvement. The Camp Lick project planning area's dense conifer vegetation often obscures views of existing scenery attributes within and below the understory, and restricts or prevents the presence of other potential scenery attributes (see Figure 1 shows dense grand fir). Among the many potential scenery attributes that are under-represented are large trees 26 to 36 inches or more diameter at breast height (DBH) (USDA Forest Service 1990, page IV-110), diverse and mature forest structures (especially Douglas-fir and ponderosa pine, both as individual trees and within stands), and small intra-stand openings or meadows with shrubs, grasses, and forbs. The existing dense and homogenous conifer vegetation also obscures forest floor accents, as well as outward "openings" to adjacent forests and landforms. In addition, logging, fire exclusion, and road construction on national forest and adjacent private lands have interrupted and diminished scenic vegetation attributes throughout the project planning area. These actions have made the forest canopy uniform in some places; however, in other places the canopy is fragmented in patterns inconsistent with historical, ecologically established scenery.



Figure 1. Overly dense stand that has typically displaced scenic attributes of the Camp Lick area's historical scenery (the desired condition would be diverse canopies with stands that are more open and include fire tolerant species, such as ponderosa pine, and forest floor vegetation).

#### Scenic Character

The Camp Lick project planning area's dominant scenic identity is its largely continuous conifer forest overlaying Clarno formation and Columbia River Basalt landforms, accented by meadows and a few rock features. The project planning area offers both close-up and distant views from the County Road 18 and 20 visual corridors in and around the project planning area. The major scenery attributes of the Camp Lick project planning area are its diverse conifer-dominant forest vegetation with occasional large trees, its riparian meadows, and its aspen stands. The forest canopy includes mixed conifer species stands, as well as stands dominated by Douglas-fir or grand fir. Lower elevation portions of these stands are often interspersed by attractive wet and dry meadows, aspen trees/groves, and shrubs and forbs. Patterns of this vegetative mosaic are typically fine-scaled, with forest canopy openings less than an acre, while the meadows and geologic areas are often much larger (25 to 185 acres). Minor scenery attributes include small scattered rocks and outcrops, fall colors, wildlife sightings of birds and mammals, and consistent atmospheric clarity. Research shows that such diversity of scenery attributes supports a positive viewing experience for people traveling through or recreating within the project planning area, and supports the quality of life for local residents and visitors (Ryan 2005).



Figure 2. Large ponderosa pine stands are typical of the scenery that was historically present in the Camp Lick project planning area.



Figure 3. Dense stand with remnant large tree; the open area allows shrubs, huckleberries, and other vegetation types to thrive.



Figure 4. National Forest System Road 18 within the County Road 18 visual corridor.

### **Existing Visual Quality**

The existing visual quality is evaluated by looking at the scenery from the routes and sites that were utilized in assigning the visual quality objectives for the Malheur Forest Plan. An evaluation of the existing condition considers the degree of visual disturbances of past activities to the natural appearing scenery that is derived by the contextual landscape and the historical range of variability.

Sensitive viewpoints occur along the County Road 18 and 20 visual corridors. The project's thresholds for scenery disturbance (Malheur Forest Plan VQOs) apply only to views from these locations; distance zones and descriptions are defined in Table 4.

Table 4. Viewing zones that apply to visual/scenery management

Distance zone	Description
Foreground	The portions of a view between the observer and up to 0.25 to 0.5 mile distant.
Middleground	The visible terrain beyond the foreground where individual trees are still visible, but do not stand out distinctly from the stand (approximately 0.5 mile to 4 miles)
Background	The visible terrain beyond the foreground and middleground where individual trees are not visible, but are blended into the total fabric of the stand (approximately 4 miles to horizon).

#### Scenic Routes and Areas

### **Foreground Visual Corridor**

There are approximately 600 acres of foreground visual corridor in the planning area. Foreground areas would be managed for partial retention visual quality objective (VQO) (Table 1). Management activities

in foreground areas may be evident to the viewer, but must remain visually subordinate to the surrounding landscape.

Along the major roads in the planning area, County road 18, 20 and NFS Road 36, the Forest transitions from a healthy mix of pine and fir stands to areas of unhealthy mixed conifer in stands that show signs of insect attack, disease, fire, or past harvesting. Some stands are screened by the densely stocked, multi-layered, mixed-conifer stands along the roadside; stand health conditions are poor due to overstocking, prolonged drought, and insect outbreaks. NFS Road 36 provides views of large ponderosa pine and mixed conifer stands. The 2008 Camp Creek Watershed Action Plan (Lower Camp Creek, Middle Camp Creek, and Lick Creek) states that 92 percent of the landscape is forested and "eighty percent of the forested area is overstocked. Conifer stands contain higher densities of trees relative to historic benchmarks, heightening the forest's susceptibility to insects and disease. Nearly 50 percent of the stands are so dense that they are highly to extremely susceptible to crown fire (USDA Forest Service 2008).

The watershed action plan describes how the last 100 years of fire suppression has promoted increased stand densities and made the area unable to function within historical fire regimes. Openings are either below or above the historical ranges (typically 5-20 percent); there is moderate conifer and/or juniper encroachment into grasslands, shrublands, and/or hardwoods (USDA Forest Service 2008).

Stands within the geological area are composed of a mature pine overstory above a mix of Douglas-fir, ponderosa pine, and grand fir. The suppression of wildfires in these stands has allowed an increasing amount of fir to develop beneath the pine and the majority of stands are moving toward a fir climax condition.

### Scenic Integrity

Scenic integrity is a measure of the degree to which the scenery is free from visible disturbances that detract from the existing scenic character that people value. Integrity is used to manage the attributes of landscape character vegetative pattern, form, line, color, texture, and scale.

Scenic integrity is measured on the Malheur National Forest through six graduated levels defined by the "visual quality objectives" (VQOs) within the U.S. Forest Service Visual Management System, Agricultural Handbook 462 (USDA Forest Service 1974). These scenic integrity levels can be applied in two ways: (1) to describe a degree of existing scenic integrity/disturbance or (2) to describe a minimum threshold for future integrity to be achieved. These levels and descriptors of how people perceive them are shown below (Table 5).

Table 5. Scenic integrity as described by visual quality objective levels

Levels of scenic integrity/disturbance (visual quality objectives)	The Forest's scenic integrity as people perceive it
Preservation	Unaltered, Complete
Retention	Unnoticeably Altered
Partial retention (the most common current condition in the Camp Lick project planning area and also the Malheur Forest Plan's typical minimum scenery disturbance threshold for Camp Lick project planning area)	Slightly Altered
Modification	Moderately Altered
Maximum modification	Heavily Altered
Unacceptable modification (never an objective on National Forest System lands)	Unacceptably Altered

Scenic integrity is measured from sensitive viewpoints inventoried by the Malheur Forest Plan, and as supplemented by project level analysis. The Camp Lick Project's existing scenic integrity as viewed from the designated sensitive viewpoints typically meets the partial retention and modification levels. There are occasional disturbances such as localized stumps, clearings, and roadways; however, the overall landscape appearance from the sensitive viewpoints is "slightly altered." Existing scenic integrity viewed from County Road 18 and 20 is largely undisturbed foreground scenery that cumulatively meets the partial retention level, with some minor or unnoticed contrasts such as existing roads, old skid roads, and scattered stumps that may individually meet partial retention or modification. The less frequent and more distant 0.5 to 4 mile middleground views available are largely natural appearing, overall meeting the modification level (Table 4).

Table 6 identifies the visual quality objectives for the management areas present in the Camp Lick project planning area.

Table 6. Visual quality objectives for specific management areas present in the Camp Lick planning area

Management Area	Acres*	Visual quality objective
General Forest (MA-1)	14,800	Retention to modification
Rangeland (MA-2)	Included in MA-1	Retention to modification
Riparian Areas (MA-3)/ riparian habitat conservation areas (RHCAs)	6,100	Retention to modification
Big-Game Winter Range Maintenance (MA-4A)	15,900	Retention to modification
Developed Recreation Area (MA-12)	5	Retention or partial retention
Old Growth Habitat (MA-13)	2,600	Manage for VQO consistent with adjacent lands
Visual Corridors (MA-14F – Foreground)	600	County Road 18 and 20 foreground – partial retention

<sup>\*</sup>Approximate acres

#### Scenic Stability

Scenic stability is the degree to which the desired scenic character can be sustained through time and ecological progression (USDA Forest Service 2007). For the project planning area, the existing scenic stability analysis focuses on the scenery attribute of vegetation, addressing its ecosystem conditions.

Scenic stability of other minor scenery attributes, such as landform, rock features, wildlife sightings, and atmospheric clarity are not involved in this evaluation, since they are not as critical to the Camp Lick area's scenic character and will change relatively little over time, regardless of ecosystem and human influences.

The Camp Lick Project scenic stability evaluation addresses current ecosystem conditions and stresses identified by field observation, data on vegetation and fire history, and interdisciplinary input from the Camp Lick Project silviculture and fuels specialists. Assessing scenic stability for vegetation in the Camp Lick project planning area is guided by methods described in Appendix J—Recommended SMS Refinements (USDA Forest Service 2007), a supplement to the U.S. Forest Service Scenery Management System to sustain socially valued scenery within an ecosystem stewardship context.

Some of the Camp Lick Project's vegetation scenery attributes are considered ecologically unstable because they have departed from the stability of historical reference conditions. Many decades of fire exclusion have allowed grand fir stands to intrude upon aspen, meadow, and pine vegetation, and transform these diverse vegetation scenery attributes into a much more uniform pattern. As described elsewhere in this report, much of the project planning area is departed from historical vegetation

conditions and departed from historical wildfire cycle conditions (see Silviculture Report and Fire, Fuels, and Air Quality Report).

The predominant ecosystem stress influencing the vegetation scenery attributes is the uncharacteristic grand fir encroachment throughout the project planning area, resulting from almost a century of wildfire exclusion. This stress has impaired or eliminated many important scenery attributes (diverse, spacious, and fire-adapted forest canopies, large trees, meadows, and aspen) within widespread portions of the Camp Lick planning area. Continued stress from grand fir encroachment would further impair and eliminate these socially valued scenery attributes. Other stressors such as pests, disease, drought, wildfire, and climate change are currently less significant, but also have potential to further impair valued scenery. Collectively, current ecosystem stress upon scenery attributes is considered to be at the high end of moderate for the project planning area, within a potential range of minor, moderate, or severe.

Because the Camp Lick planning area's major scenic attributes (diverse forest canopy with large trees, meadows, and aspen) share a typically moderate risk based on their condition and ecosystem stress, the scenic stability of these major vegetation scenery attributes correlates best with the low scenic stability level definition below:

• Low stability – some dominant scenery attributes of the valued scenic character are present and are likely to be sustained. Known scenery attribute conditions and ecosystem stressors may seriously threaten or have already eliminated the others.

Numerous trends in the Camp Lick planning area indicate scenic stability is in decline or could be rated low. The coniferous forest is generally overstocked in both ponderosa pine and mixed fir types, with excess ground and ladder fuels. Natural processes associated with fire exclusion are obvious. These conditions will make it difficult to keep wildfire starts from expanding and burning intensely. Fire suppression has resulted in a change in species and structural stage composition. These conditions risk losing key components of the ecosystem and dominant scenic attributes such as the open, park-like stands of ponderosa pine and minor scenic attributes such as the aspen stands.

### **Desired Condition**

The optimal scenic character, stability, and integrity for the Camp Lick project planning area would display a more open and diverse forest canopy representative of historical ecosystem conditions, typically displaying more large conifers (greater than 30 inches DBH) and more wildfire-adapted species such as ponderosa pine and western larch, as well as more aspen trees/groves and meadows interspersed within the project planning area's existing conifer stands, meadows, and riparian areas. The presence of existing small and intermediate-sized trees would be greatly reduced, especially the many trees that crowd and weaken the more attractive larger trees, meadows and aspen. Small and moderate sized irregularly shaped openings or grass-forb meadows up to one quarter acre in size would be more frequent, and often bounded by diverse, historical canopies including full-crowned, mature conifer and aspen trees. Lastly, reintroduction of wildfire is desired, primarily resulting in fine-scaled, irregular shaped, and low-to moderate-intensity burn patterns that would better reflect historical conditions. These scenic attributes would be distributed through time and space to offer increased attractiveness in terms of vegetative forms. colors, canopy texture, and immediate foreground spatial variety, while improving and restoring the overall scenic character. These conditions would also increase the ecological resilience and stability of vegetation scenery attributes that are central to the project planning area's historical scenic character, image, and identity.

The desired scenic character for the Camp Lick Project includes two major elements: (1) the optimal scenic character described above; and (2) minor variations to that character needed to restore and sustain

other essential resource objectives such as late-seral habitat for wildlife, fuels reduction, forest health, public safety, and ecosystem resiliency, as well as overall treatment feasibility.



Figure 5. Example of the desired condition in the Camp Lick project planning area, County Road 18 Project (2011)

Adverse scenery conditions and worsening vegetation trends have been reduced and often reversed in recent thinning areas near the Camp Lick planning area (such as displayed in Figure 5). Research indicates that forest canopy thinning and fuels reduction activities are more compatible with public scenery preferences for large trees, more open and diverse canopy structures, less woody debris, and understory vegetation that softens the effects of forest floor disturbances (Ryan 2005).

Restoration actions such as widespread mechanical reduction of forest canopy density, including selective removal of less resilient and fire intolerant species, would support a return to historical wildfire cycles which could then most reliably re-create and maintain the historically diverse, resilient, and attractive scenic character of the landscape.

#### Scenic Character Goals

The following scenic character goals would move ecosystem conditions towards an optimal and more sustainable desired scenic character.

- 1. Retain and restore the historical "ecologically established" vegetation scenery attributes by reducing vegetation density, thereby increasing large tree (greater than 30 inches DBH) prominence, vitality, presence, and overall vegetation diversity (size, age, and species composition that increases in fire-adapted species such as aspen and pine; and more diverse canopy spatial/patch patterns, openings, and edge densities).
- 2. Increase ecological resiliency and scenic variety within the forest canopy by shifting vegetation and fuels conditions toward the project planning area's ecological historical range through wildfire cycle restoration (resulting in more open canopies with spatial/species diversity, with more larger and more fire-adapted trees present).

### Scenic Integrity Goals

The Malheur Forest Plan has standards and guides for the Scenic Integrity goals:

- 1. General Forest (MA-1): Retention to Modification
- 2. Rangeland (MA-2): Retention to Modification
- 3. Riparian Areas (MA-3)/ riparian habitat conservation areas (RHCAs): Retention to Modification
- 4. Big-Game Winter Range Maintenance (MA-4A): Retention to Modification
- 5. Developed Recreation Area (MA-12): Retention or Partial Retention
- 6. Old Growth Habitat (MA-13): Manage for VQO consistent with adjacent lands
- 7. Visual Corridors (MA-14F Foreground): County Road 18 and 20 Foreground Partial Retention

### Scenic Stability Goals

The Malheur Forest has standards and guides for the Scenic Stability goals as developed in Forest Service Handbook 701. The goal is to begin an upward trend towards the moderate stability for the planning area.

1. Most dominant scenery attributes of the valued landscape character are present and are likely to be sustained. A few attributes may have been lost or are in serious decline.

### **Environmental Consequences**

### Methodology

Indicators of effects of the Camp Lick Project on scenery include: (1) a description of changes to scenic integrity and (2) a determination of scenic stability (changes in the sustainability of scenery attributes). To determine these effects, Forest Service Scenery Management System (USDA Forest Service 2007) methods are applied to indicate changes in scenic character and its sustainability (scenic stability). Changes in scenery disturbance (scenic disturbance) are measured using criteria established by the Forest Service Landscape Aesthetics, A Handbook for Scenery Management, Agriculture Handbook 701 (USDA Forest Service 1995) and Forest Service Visual Management System (USDA Forest Service 1974) as visual quality objectives (VQOs).

### Spatial and Temporal Context for Effects Analysis

The Camp Lick planning area (and half a mile surrounding it) is the spatial analysis area for scenic character and scenic stability because these apply to the entire area. Views from the sensitive recreation and public use roads, or areas in or near the planning area boundary, are the spatial analysis area for scenic integrity. Descriptions of short-term scenery effects apply to those lasting less than 10 years; long-term scenery effects span 10 to 100 years or more.

#### Past, Present, and Foreseeable activities Relevant to Cumulative Effects Analysis

The past, present and foreseeable activities that contribute to the cumulative effects to scenery resources range from the regeneration harvests, thinning, prescribed fire, and grazing practices that overlap in space and time with the activities proposed as part of the Camp Lick Project. The timeframe for which these effects overlap ranges from the time of the activity through the life of the effect. The spatial bounding is the project boundary as the activities are visible from commonly used routes.

#### Past Activities

Past harvest activities have created long-term visual effects in the area that overlap in time and space with the Camp Lick Project. Substantial timber harvesting that facilitated the removal of the large ponderosa pine, western white pine, western larch, and Douglas-fir (generally early seral species) in the Camp Lick

area began in the 1930s. Since then, late seral species have grown in these areas increasing stand densities. So, while perhaps not immediately apparent to the casual viewer, stands are denser and with a different species composition than would have been experienced historically.

In the recent past, wildfires were actively suppressed leading to a buildup of ground fuels and overstocked stands. Because of current uncharacteristic fire behavior, all fires are being actively suppressed to reduce the chance of other major stand replacement fires. There have been minimal effects due to past wildfires; there were approximately 150 small fire starts recorded between 1971 and 2011, with an average size of 0.3 acre in the planning area, which does not create significant cumulative effects to visual quality. The visual evidence of past fires is in keeping with what is naturally expected in a fire dependent ecosystem.

#### Present Activities

**Recreation** – Ongoing use of the Camp Creek Campground, dispersed camping, hunting, fishing, firewood gathering, and other recreational uses occurs year-round (with peak use from late May through November). The ongoing recreation activities are not expected to decrease the visual quality objectives that are associated with the Camp Lick project planning area.

**Grazing** – Portions of four allotments are currently permitted to graze within the Camp Lick project planning area. The ongoing grazing activities are not expected to decrease the visual quality objective that is associated with the Camp Lick project planning area.

**Invasive Plant Treatments** – The Malheur National Forest Site-Specific Invasive Plants Treatment Project (USDA Forest Service 2015) authorizes treatment of known and newly discovered non-native invasive plants potentially using herbicide, manual, mechanical, biological and/or cultural treatments. Invasive plant treatments (primarily hand-pulling and grubbing) are ongoing in the planning area, but are not expected to add substantial effects to the visual quality objectives of the Camp Lick project. Reductions in invasive plants would maintain the scenic stability of the herbaceous scenic attributes.

**Special Uses** – Currently there are five Lands Special Uses in the planning area; one buried telephone line, one electrical powerline, one spring development, one stream gauge, and an irrigation ditch. The ongoing activities are not expected to decrease the visual quality objective that is associated with the Camp Lick planning area.

#### Reasonably Foreseeable Future Activities

Aquatic Restoration Project Treatments – Potential projects that could be implemented under the Aquatic Restoration Environmental Assessment Decision Notice (2014a) include: fish passage restoration (e.g., replacement or removal of culverts), large and coarse woody debris placement along streams in the project planning area, removal or reduction of lodgepole encroachment, juniper and hawthorn removal, aspen stand enhancement, log weir and boulder modification, legacy floodplain structure removal, reduction of recreation impacts and road erosion control, maintenance and development of off-channel livestock watering facilities, riparian hardwood planting, riparian fencing, and beaver habitat restoration.

The foreseeable activities that are planned to occur would perpetuate a modified scenic expression of the landscape. It is expected that this expression would improve as the present and foreseeable actions are of a lighter or more sensitive approach than those of the past. The resiliency of the scenic attributes is expected to be improved as management activities are carried out to maintain the vegetation within the natural range of variation. These practices should improve scenic integrity and stability.

### Project Design Criteria and Mitigation Measures

Table 7. Project design criteria

Criteria number	Objective	Design Criteria	Areas, units, or activity type	Responsible person
Visuals- 1	Blend treatment units and create free-form vegetation patterns that mimic natural patterns,	Unit design and layout – general requirements applicable to all foreground and middleground areas:  In order to blend treatment units and create free-form vegetation patterns that mimic natural patterns, straight lines and geometric shapes for unit boundaries should be avoided or minimized.  Tree or shrub islands of various shapes and sizes would be retained in a random distribution pattern where possible, to provide a characteristic vegetation appearance while meeting objectives for fuel reduction and bark-beetle risk reduction.	All foreground and middleground areas	Timber sale administrator, layout crew
Visuals- 2	Management Area 14 immediate foreground design and layout specific requirement	If necessary, unburned slash in the foreground area should be scattered to reduce the color contrast of any exposed soil at burn-pile sites.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator, layout crew
Visuals- 3	Management Area 14 immediate foreground design and layout specific requirement	On slopes facing the road, campground, or trail, slash piles would be placed 50 feet or more away from the road, campground, or trail where practicable to reduce visual impacts. Slash within 150 feet of the road should be removed, grapple-piled, and burned, or hand-piled and burned.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator, burn boss, layout crew
Visuals- 4	Management Area 14 immediate foreground design and layout specific requirement	If after one year pile-burned sites are visible from the road/campground/trail, re-burning, scattering, covering with natural duff, or masticating burned piles should be accomplished in order to minimize visual impact of management activities.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator, burn boss,
Visuals- 5	Management Area 14 immediate foreground design and layout specific requirement	Where marking paint can be seen, it is to be applied to the side of the tree facing away from the road/campground/trail. Flagging and signs that are visible from the road/river/trail should be removed upon completion of the harvest unit activities.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator, layout crews
Visuals- 6	Management Area 14 immediate foreground design and layout specific requirement	Stumps should be cut flush or close to the ground where practicable and always within 6 inches of the ground on the uphill side.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator

Criteria number	Objective	Design Criteria	Areas, units, or activity type	Responsible person
Visuals- 7	Management Area 14 immediate foreground design and layout specific requirement	The number of landings along National Forest System roads, 36, 3620, and County Road 18 and 20 should be kept to a minimum. Landing size should be minimized and landings should be shaped to blend with the contours of the landscape to maintain visual standards. Use established openings or old landings where possible. Natural vegetation should be retained between the landing and the road to serve as vegetative screening where practical and not in conflict with Wildland Urban Interface objectives.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator
Visuals- 8	Management Area 14 immediate foreground design and layout specific requirement	Prior to harvest, the locations and clearing for all temporary roads and landings within 150 feet of National Forest System roads 36, 3660, 3620, and County Road 20 will be reviewed by a landscape architect or recreation specialist. Harvest activities in this zone must maintain a partial retention (slightly altered) visual objective. The ground disturbance must be minimal and the size and number of landings in the zone must be minimized. If the burning of the landing piles in this zone would cause more than 20 percent tree mortality surrounding the piles, consider either chipping or hauling the slash to a disposal area.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Landscape architect or recreation specialist, burn boss
Visuals- 9	Management Area 14 immediate foreground design and layout specific requirement	Landings and skid trails should be returned to their original/natural profile, with no continuous berms or soil piles left behind. This does not preclude the use of water bars to reduce erosion on skid trails. Landings and skid trails should be re-vegetated with native grasses and forbs to protect soils and watershed processes.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator
Visuals- 10	Management Area 14 immediate foreground design and layout specific requirement	Landings and skid trails should be returned to their original/natural profile, with no continuous berms or soil piles left behind. This does not preclude the use of water bars to reduce erosion on skid trails.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator
Visuals- 11	Management Area 14 immediate foreground design and layout specific requirement	Landings and skid trails should be revegetated with local, native grasses and forbs to enhance skip and gap structure, and protect soils and watershed processes. Where practical minimize skid trails and roads located perpendicular to the road in order to minimize the forest visitor's direct views into landings.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator
Visuals- 12	Management Area 14 immediate foreground design and layout specific requirement	Avoid placing skid trails within 100 feet of the road, campground, or trail where practical. Harvest units within the immediate foreground shall have a mosaic of stocking levels and tree sizes will be retained.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator
Visuals- 13	Management Area 14 immediate	Abrupt transitions between thinned and unthinned stands should be avoided in the foreground.	Immediate foreground areas – 150 feet from scenic/visual corridor	Timber sale administrator

Criteria number	Objective	Design Criteria	Areas, units, or activity type	Responsible person
	foreground design and layout specific requirement		center point (road, campground, or trail) into the project activity area.	
Visuals- 14	Management Area 14 immediate foreground design and layout specific requirement	Burning prescriptions in visual foreground areas should be developed to produce low intensity fire, minimizing damage to the larger-diameter overstory trees.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Burn boss
Visuals- 15	Management Area 14 immediate foreground design and layout specific requirement	Trees greater than 21 inches DBH within 200 feet of the road, campground, or trail would be protected from high intensity flames that could cause mortality. This protection could include activities such as raking needles away from the base of trees or wetting down the area around the tree prior to ignition.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Burn boss
Visuals- 16	Management Area 14 immediate foreground design and layout specific requirement	Burning intensities will be controlled by ignition methods and techniques to retain a minimum of 80 percent of the live crowns. Isolated small trees within a stand of larger trees may end up having less than 80 percent of the live crown remaining.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Burn boss
Visuals- 17	Management Area 14 immediate foreground design and layout specific requirement	No marking paint should be applied within the Lower Camp Creek Campground if applicable, if required, apply marking paint to the backside of the tree out of view from the campground and National Forest System roads 36, 3660, 3620, and County Road 20. Signage should be minimal and low key, avoiding shiny or metallic materials and bright or white colors.	Immediate foreground areas – 150 feet from scenic/visual corridor center point (road, campground, or trail) into the project activity area.	Timber sale administrator, layout crews

### Alternative 1 - No Action

#### **Direct and Indirect Effects**

There would be no direct or indirect effects to scenic integrity, stability, or character from the no action alternative. Alternative 1 would continue two trends: 1) scenic disturbance reductions through vegetation regrowth, and 2) scenic impairment through increased tree density and loss of attractive variety (conifer stand spatial/structural diversity with large tree character and fire-adapted vegetation such as western larch, and ponderosa pine) and impaired ecosystem resilience.

### Scenic Integrity

Alternative 1, no action, would not produce any short-term visual disturbances or directly change the planning area's existing disturbances viewed from the planning area's scenic visual corridors. Many of the existing scattered minor and moderate disturbances described in the existing condition section would be greatly diminished through vegetative renewal over the next 10 years. However, potentially strong and adverse outcomes affecting scenic disturbance could become increasingly more likely with alternative 1, since declines in fire-adapted vegetation and ecological resiliency would continue in future decades

throughout the planning area. In the event of an uncharacteristic wildfire many of the desirable elements of landscape character would be lost for an extended period of time.

The Camp Lick Project's scenic integrity as viewed from sensitive viewpoints would continue to meet the partial retention and modification level. The County Road 18, 20 and NFS Road 36 foreground would continue to meet the partial retention level, and the middleground views would meet the modification level.

### Scenic Stability

Alternative 1, no action, would cause no direct or indirect effects to the existing condition. The outcomes of the no action alternative are related to increasing stand density, encroachment of less resilient species, increasing fuel loads, and high levels of mortality. This trend decreases the resiliency of the timber stands causing the scenic stability to be continually reduced as conditions degrade.

Scenic stability effects are based on assumptions for a continuation of the existing adverse vegetation conditions (of overly dense, small sized, and uniform vegetation), resulting in continued low stability. This level of scenic stability would likely persist for decades, unless vegetation and climate conditions result in an exceptionally large and severe canopy-consuming disturbance event (e.g., pests, insects, diseases, or wildfire), which could potentially lower the planning area's vegetation scenic attributes to the no stability level.

#### Scenic Character

Alternative 1, no action, would not produce any short-term visual disturbances or directly change the planning area's existing scenic character. Many of the existing scattered minor and moderate disturbances described in the existing condition section would be greatly diminished through vegetative renewal over the next 10 years. However, potentially strong and adverse scenic disturbance could become increasingly more likely with alternative 1, since declines in fire-adapted vegetation and ecological resiliency would continue in future decades throughout the planning area. In the event of an uncharacteristic wildfire many of the desirable elements of landscape character would be lost for an extended period of time.

#### Cumulative Effects

Because there are no direct or indirect effects, there would be no cumulative effects from taking no action.

### Alternative 2 - Proposed Action

#### **Direct and Indirect Effects**

Scenic Integrity, Stability, and Character

**Silviculture treatments and prescribed burning**: Silviculture treatments and prescribed burning would produce minor short-term scenery disturbances, including visible soil color, canopy and tree/plant contrasts such as stumps, skid roads, burn piles, burn areas, and landings. A small portion of these effects would be visible from the planning area's visual corridors.

Stand improvement commercial thinning treatments would leave stumps which would be visible from an immediate foreground distance (300 feet). However, stand improvement commercial thinning would open up the stands and allow more sunlight into the forest floor, and would provide a longer viewing distance into the forest stands.

The activities of stand improvement commercial thinning treatments that would occur include tractor logging and skidding and skyline logging. Tractor logging and skidding creates some soil disturbance

along the skid trails which would disturb the topsoil and expose soils. The understory vegetation would be disturbedalong these skid trails, and would be visible from an immediate foreground distance. These visual effects are usually an immediate impact that dissipates within a short period of time. As vegetation returns, the impacts are usually not visible to the casual viewer after one growing season. Skyline logging creates similar effects, except that the skid trails associated with skyline logging would usually be longer than those associated with tractor logging. These trails can often be visible from middleground viewing distances. However, the effects wouldbe short-term.

Stand improvement biomass thinning would remove trees up to 11 inches diameter at breast height where these trees are in excess of the historic range of variability. This activity would have a benefit to visual quality. Most viewers prefer views of large trees with open spacing.

The fuel treatments that would occur congruently with the harvest treatments include mechanical thinning, prescribed burning of the fuels, whole tree yarding, cut to length, grapple piling, and hand piling. These treatments would clean up the majority of the slash created by the harvest activities. The effects would be primarily beneficial to the visual quality, reducing the visual impacts of human activities with a natural appearing landscape. Removal or burning of residual material (tree stumps, snags, limbs, and brush piles), would remove the "clutter" that detracts from the scenic attributes. Most visual preference surveys indicate dislike for "messy" landscapes (Bradley 1996).

Pile burning and underburning would create scorched and blackened underbrush, saplings, bark, grasses, and forbs. These effects would continue for one to five years. There would be a possibility of the prescribed fire getting into the crowns of trees. This could cause a cluster of dead scorched trees. After the following growing season, the majority of the effects would no longer be visible as new growth of forbs and shrubs would resprout. There may be some minimal long-term effects such as small patches of overstory mortality; however, the patches are not expected to detract from the landscape character.

Treatments would improve the long-term scenic integrity, by opening the stands up for increased visibility and visual diversity. Prescribed fire would improve conditions for fire resistant species, which would indirectly improve landscape character attributes of large tree character and open stands that can withstand low intensity fires. This treatment would improve visuals into the forest understory from foreground views. Most of the scenic integrity in and around the planning area is not visually unique to the Malheur Forest. If the general area is viewed from a distance or from an aerial position, the dominant features are the varied topography and the extensive timber harvest pattern of the forest vegetation. The proposed project is located within an area that has had previous timber management projects and fire activity, which has shaped the appearance of the landscape. During the implementation of proposed activities, dust created by construction traffic along access roads may draw some visual attention. Due to other features which draw visitors' attention from planning area topography and vegetation screening, it is likely that the casual observer would notice very little of the project after actives are completed. The effects of the activities would be temporary and of short duration. Once the project activities are completed, any disturbed areas would not be likely to cause long term effects drawing visual concern. The edges of the treated areas would gradually fill in with vegetation further reducing the line, texture, and color contrast

**Road activities:** Temporary road construction and temporarily opening closed roads (maintenance level 1) for log haul would be visible from some viewpoints. When these temporary roads are rehabilitated following use, and maintenance level 1 roads (closed roads) temporarily opened for log haul are reclosed following logging, most of the visual impact would not be seen from open roads except for the berms and the first section of closed road.

#### **Cumulative Effects**

The effects of past timber harvest and wildfire activities, in addition to ongoing recreation, grazing, and special uses in the planning area are accounted for in the existing visual quality objective and scenic stability level. Actions under the 2015 Invasive Plants Treatment ROD are expected to improve grassland composition, restore areas, and cumulatively maintain visual quality and scenic stability. Reasonably foreseeable future activities to be authorized under the Aquatic Restoration Decision would maintain or improve the scenic integrity and stability of the landscape in affected areas.

### **Summary of Effects**

Table 8. Summary table of scenery effects for the Camp Lick Project

Resource Element	Resource Indicator	Alternative 1	Alternative 2
Scenic Character	Character Type	Scenic vegetation diversity is impaired, too dense, lacks extent of historical large trees.  No positive wildfire influences on vegetation structure/species.	Treatments would improve the long- term scenic integrity, by opening the stands up for increased visibility and visual diversity. Prescribed fire would improve conditions for fire resistant species, which would indirectly improve landscape character attributes of large tree character and open stands that can withstand low intensity fires.
Scenic stability	Scenic stability	LOW	MODERATE
	level	Scenic stability project-wide most vegetation scenery attributes are impaired, some absent or not likely to be sustained due to ecosystem stress (wildfire imbalance; excess white fir).	Scenic stability project-wide vegetation would shift towards historical conditions of fire adapted scenery attributes: meadows, aspen, diverse conifer canopy with more large, fire-adapted species.  Would reduce risk of scenery impairment from ecosystem
			disturbance events.
Scenic Integrity	Visual quality objective	PARTIAL RETENTION OR MODIFICATION	PARTIAL RETENTION OR MODIFICATION
		Existing disturbance is minor and widespread. Meets Malheur Forest Plan thresholds for all sensitive views (County Road 18). No new impacts, growing risk for ecosystem disturbances.	Widespread new minor disturbances within sensitive viewsheds (County Road 18). Would meet Forest Plan's VQO thresholds for all sensitive views. Reduced risk of ecosystem disturbance events.

## Compliance with Forest Plan and Other Relevant Laws, Regulations, and Policies

Forest Plan Objectives (pages IV-15 to IV-16)

Manage other specified forest and county roads with a lower emphasis on maintaining visual
quality (sensitivity level II). Meet the visual quality objectives of foreground partial retention and
middleground modification in these corridor viewsheds. The effects of management activities
would be obvious in these middlegrounds. This visual quality objective would be met in the
County Road 18 visual corridors.

• Emphasize horizontal diversity in the visual corridors (both sensitivity level I and II). This will be experienced as one moves through the corridor, not as vertical diversity on every acre. Create this by developing a sequence of visual experiences utilizing group selection harvest techniques applied to small treatment units (1/4 to 5 acres) in foregrounds... The effect is to have a multiaged appearance... *Treatments proposed in the visual corridors would promote horizontal diversity along the corridor*.

### Forest-Wide Standards (page IV-27)

- Forest-wide Standard 25: The minimum visual quality objective for the Forest is maximum modification. This visual quality objective would be applied and met in the General Forest areas. Evidence of proposed harvest activities would be visible including skid trails, skyline corridors, temporary roads, and landings. Activities characteristic of surrounding areas.
- Forest-wide Standard 27: Rehabilitate landscapes containing negative visual elements. The
  County Road 18 visual corridors were impacted by harvest activities prior to the 1990 Malheur
  Forest Plan. Encouraging large-tree components, gap and clump structure, reduced surface and
  ladder fuels, and a more historical species composition would improve landscape visual elements
  over time.

### Management Area Standards

- Project activities would meet a visual quality objective of retention, partial retention, or modification for the visible and potentially visible areas (MA 14 Standard 2, page IV-108).
- Maintain visual corridors that overlap with big game winter range maintenance to achieve a minimum habitat effectiveness of 60 percent for elk. Refer to Management Area 4A standards (MA 14 Standard 5, page IV-108). See Wildlife Report.
- Fish and wildlife improvement/maintenance projects are designed and would be implemented to meet visual quality objectives (see direct and indirect effects above) (MA 14 Standard 6, page IV-108).
- Timber harvest and related activities are designed to accomplish visual resource management objectives (see DEIS Appendix C Project Design Criteria) (MA 14 Standard 9, page IV-109).
- Foreground areas would be managed to meet visual quality objectives (see direct and indirect effects above). Alternative 2, would benefit the health, resiliency, and visual appearances of the County Road 18, 20 NFS Road 36 and 3620 visual corridors (MA 14 Standard 11, page IV-109).
- No regeneration or overstory removal harvesting would occur in foreground of sensitivity level 1 and 2 corridors (MA 14 Standard 12, page IV-109).
- All middleground areas would be managed to meet visual quality objectives (see direct and indirect effects above) (MA 14 Standard 14, page IV-109).
- Horizontal diversity and multi-age appearance of vegetation would be maintained within visual corridors by maintaining a mix of thinned and unthinned areas (spatial complexity) and variable thinning densities (MA 14 Standard 16, page IV-109).
- Residues (i.e., fuels) would be managed to provide a natural-appearing landscape in visual corridors and to minimize visual effects (see Camp Lick PEA Appendix C Project Design Criteria) (MA 14 Standards 27 and 28, page IV-111).

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